PROGRAM OVERVIEW

The University of Alaska Fairbanks College of Fisheries and Ocean Sciences (CFOS) is a regional and world-class research organization with strong graduate and undergraduate education programs. While CFOS focuses on Arctic issues, faculty and students work worldwide, from coastal to deep ocean regions. The College is geographically diverse with a dozen locations in Alaska serving students, local communities and the fishing industry. Our research addresses the most pressing issues in fisheries, marine science and changes in the Arctic.

The College has staff, faculty and students in three departments, totaling more than 300 people. The annual budget exceeds 50 million dollars provided primarily by external research funding and in part by the State of Alaska. Major external support for CFOS research comes from the National Science Foundation, Bureau of Ocean Energy Management, National Oceanic and Atmospheric Administration, and North Pacific Research Board.

*Research awards do not include 2010-2016 American Reinvestment & Recovery Act funding.

FISHERIES

Fisheries researchers focus on evolution, genetics, physiology, ecology, population dynamics, fishery oceanography, aquaculture, economics, seafood processing, human dimensions, and fisheries management and policy. This research supports wise management of commercial, sport and subsistence fisheries in marine and freshwater systems throughout Alaska and beyond.

MARINE BIOLOGY

Marine Biology faculty work in a variety of ecosystems from intertidal zones to coastal shelf and deep-sea, studying community ecology as well as organismal biology and physiology of seaweeds, invertebrates, marine mammals and seabirds. Major focus areas include effects of environmental change on Alaskan and Arctic marine ecosystems, biology of commercial shellfish species, and interactions between Native communities and the marine environment.

OCEANOGRAPHY

Oceanography researchers study the general areas of physical, chemical, biological, geological, and fisheries oceanography. Research programs include exploration of the Arctic Ocean, ocean circulation patterns, dynamics of internal waves, trophic dynamics and associated biogeochemistry, and a range of studies linking marine environment with habitat for marine species.
R/V SIKULIAQ AND THE SEWARD MARINE CENTER

The research vessel Sikuliaq is a 261-foot oceanographic research ship owned by the National Science Foundation and operated by CFOS that brings scientists to the ice-choked waters of Alaska and the polar regions. The Seward Marine Center supports the ship and a host of research activities, including the Northern Gulf of Alaska Long-term Ecological Research site, an observation program developed as the Seward Line program in 1998 to understand marine ecosystem response to climate variability.

LENA POINT FISHERIES FACILITY

The Lena Point facility in Juneau houses CFOS fisheries faculty, staff and students. The facility has 11 research laboratories ranging from computer labs to wet labs with running seawater and tanks. The 30,000 square foot facility is co-located with the NOAA Ted Stevens Marine Research Institute, promoting collaboration on fisheries and marine science research, instruction and outreach. The research vessel Ishkeen supports fisheries and diving research in Southeast Alaska waters.

KASITSNA BAY LABORATORY

The Kasitsna Bay Lab is a NOAA-owned and UAF-operated shore facility. The lab is the home base for the UA Scientific Diving Program, a host of field courses and active research projects. The facility has a running seawater lab, a cold room, multiple classrooms and various hard-bottom skiffs. Coastal monitoring of intertidal and shallow subtidal communities in Kachemak Bay began in 2002 in an effort to understand environmental drivers, including glacial melt influence.

KODIAK SEAFOOD AND MARINE SCIENCE CENTER

As the state’s only research processing plant, the Kodiak Seafood and Marine Science Center (KSMSC) provides seafood-processing training, applied research and problem-solving to benefit Alaska’s commercial fisheries and seafood processing industry. KSMSC also supports research on marine ecosystems and environmental concerns.

OCEAN ACIDIFICATION RESEARCH CENTER

The Ocean Acidification (OA) Research Center is Alaska’s premier OA lab. It processes samples from around the nation and conducts its own research into ocean acidification, particularly in Alaska waters. The aim of the center is to determine the broader climate drivers that are leading to decreases in ocean pH and the impacts of these changes on commercial and other species.